ON

RETROFLEXION

OF

THE UNIMPREGNATED UTERUS;

WITH

CASES ILLUSTRATIVE OF ITS CAUSES AND OF A NEW MODE OF TREATMENT.

BY

JOHN MOIR, M.D., F.R.C.P. ED.,

CONS. PHYS. OF THE EDINR. ROYAL MATY. HOSP., ETC.

EDINBURGH: PRINTED BY MURRAY AND GIBB.

MDCCCLX.

[REPRINTED FROM THE EDINBURGH MEDICAL JOURNAL, FEBRUARY 1860.]

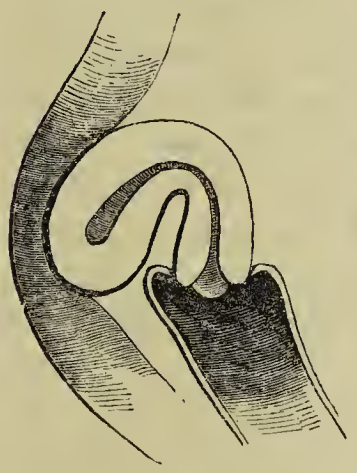
ON RETROFLEXION

OF

THE UNIMPREGNATED UTERUS.[1]

Professor Simpson has republished, in the first volume of his *Obstetrical Works*, p. 199, an article (originally written for the *Dublin Medical Journal* of May 1848) on Retroversion of the unimpregnated uterus, in which will be found a clear and admirable resumé of all that was then known on the subject; and in which he refutes the generally entertained opinion of the infrequency of the disease, and distinctly points out its symptoms, diagnosis, and mode of treatment.

The opinion expressed in that paper, that practically and pathologically there is no true difference between retroflexion and retroversion of the uterus, is one, the perfect accuracy of which may, I think, admit of question. It appears plain to me that, in retroversion, the *cause* is connected, more than in retroflexion, with altered condition of the vagina and of the other connections of the uterus; and that, consequently, the *treatment* of these cases must, to some extent, be different; and that, besides, the *effects* of the two, as inducing sterility, are different, as I have known fecundation to occur in cases of very decided retroversion of the uterus, but not in any of decided retroflexion; and without venturing to insist that this process is impossible in these latter cases, it must at least be extremely rare, and intelligibly so, considering the angle that exists in the cavity of the uterus, when this latter deviation from its normal form occurs. (See diagram.)



The principal object, however, of the following remarks, is to point out some at least of the causes inducing this particular misplacement, and to propose an addition to the remedial means at present generally adopted in its treatment. I need scarcely add, that the same principles apply to cases of anteflexion.

[1] Communicated to the Edinburgh Obstetrical Society.

Retroflexion occurs in two very different conditions of the uterus: *first*, in the normal, healthy, unimpregnated organ; and, *second*, in the same organ soon after delivery, when its bulk and attachments are in a very different condition. A statement of one or two cases will perhaps best illustrate these two different forms.

I. In 1848 I was requested to see a young lady, labouring under all the painful and distressing symptoms of this affection. On inquiring into the particulars of its origin, it was ascertained that, about a year previous to her coming to town, her servant fainted, and there being no one else in the house to assist her, she, with a violent effort, succeeded in lifting into bed the servant, who was a very big heavy woman, but experienced at the time a violent pain at the lower part of the back, as if something had given way. From that time till she came to town, my patient had become a completely altered person. Instead of being, as before, cheerful, active, and industrious, and able to walk long distances, she was scarce able to walk at all, and when she did, could only drag her limbs along with the greatest difficulty, and had become pale, languid, and despondding, and unfit for any exertion. All the usual remedies for such symptoms had been tried, previously to her coming to town, but without benefit. On examination, retroflexion was found to exist. The simple uterine bougie, No. 1, was introduced into the uterus, and retained without difficulty. She was soon relieved from many of her distressing feelings, and after wearing the instrument for some time, and using other remedies to improve her general health, she was completely cured, and enabled to resume her usual duties.

In striking contrast with the preceding case in its results, though not in its cause, I shall mention that of a young lady which occurred so far back as about 1828, and who was for many years under my father's care. She had been assisting the servant to change the position of some heavy furniture, a piano, when, in making the effort, something, as she said, suddenly gave way at the lower part of the back, and she became almost powerless. From being one of the most active of persons, she forthwith became a confirmed invalid. I remember well the leechings, cuppings, and blisterings she endured; the liniments of various kinds, the tonics, and every possible remedy considered likely to benefit her, which were tried, under the direction of my father, assisted by Drs Hamilton,[1] jun., Abercrombie, and others; but all without avail. For years she lay sleepless and restless—unable to walk or take any active exercise—occasionally lifted to a sofa, but almost always in the recumbent position—with constant uneasiness and dragging pain at the lower part of the back;—all these untoward symptoms being supposed at that time to arise from some injury to the spinal column. After years spent in this way, she tried bone doctors and rubbers, but all equally in vain, and then left Edinburgh for the country. So soon

[1] For Dr H.'s views on this disease, see P.S. to this paper.

as the true nature of retroflexion of the uterus was pointed out to the profession, I felt satisfied as to the nature of this case, and made known to the lady's relations (who were my patients) my opinion regarding it, and the appropriate treatment, with a view to attempting her relief if she would submit to the treatment. By this time, however, the catamenia had ceased, her sufferings were diminished, and though still an invalid, she was able to drive out in a little carriage in the recumbent posture, and declined submitting to any further treatment. She died a few months ago, and I should have liked much to ascertain, after death, whether my opinion of the case had been a correct one; but this could not be obtained. I entertain, however, very little doubt as to what the nature of the case had been, and firmly believe that, if instead of having been ineffectually tortured for years, both externally and internally, by all sorts of remedies, the treatment now known and in use had been adopted, she would, equally with the previous patient, have been restored to a life of activity and usefulness.

These two cases, out of many similar that I have seen, illustrate very clearly one distinct cause of this painful affection; and although patients labouring under it cannot always, as in these cases, fix upon a particular occasion when the flexion may be supposed to have occurred, yet in the majority, I think, of cases occurring in the unimpregnated uterus they are able to do so. I am inclined to believe that in many, if not all, the cases, when no particular date can be assigned for its occurrence, it does so in persons whose bowels are habitually very constipated, and that it has been induced by the violent strainings necessary for their evacuation; and it can be easily conceived, that if the uterus be once turned back in such cases, the loaded state of the rectum and sigmoid flexion of the colon will have a tendency to retain it in its abnormal position.

It has been alleged, on the one hand, that inflammatory action or congestion, occurring in some portion of the uterus, may alter its position,—for instance, that a state of congestion of the anterior wall may turn it backwards, and *vice versa;* and, on the other, that the misplacement will be remedied by using the appropriate means to relieve the diseased action. I can truly say, that I have not been able either to trace a case of true retroflexion to such a cause, or to produce the slightest improvement in any such case by the use of any such remedies, though I have had occasionally to employ them for the removal of other symptoms indicating their use.

II. I shall now state one or two cases where the retroflexion occurred soon after delivery:—

In 1843, a lady, who from change of fortune in her husband's affairs, was much reduced in worldly circumstances, and helped to support her family by dressmaking, being on one occasion much pressed for some article of dress, sat up in bed on the second day after her delivery, and made every possible exertion to accomplish her task. She was however suddenly seized with a violent pain in

the lower part of the abdomen and back, accompanied by a feeling of great prostration and weakness. On seeing her, I for a time felt very much at a loss how to account for the symptoms, until I examined the state of the uterus per vaginam, when the mystery was at once solved. The fundus of the uterus, like a large tumour, was felt lying between the vagina and rectum, the os uteri being rather high and nearer the pubes than in ordinary cases. An attempt was at once made, but unsuccessfully, to push up the fundus uteri with the fingers, and thus reduce the organ to its natural position; but on looking about I found an instrument suited to my purpose—a smooth piece of hard wood, rounded off at the ends, about a foot long, two-thirds of an inch broad, and one-fourth of an inch thick—used for quilling. This was passed up the os and cervix uteri, and then directed backwards and downwards, while two fingers of the left hand pressed up the fundus. The instrument passed easily along the whole cavity of the uterus, which was at once restored to its proper position, and the patient immediately relieved. On making some slight exertion soon after, the retroflexion again occurred, and was again rectified in the same manner. The patient had no further return of the misplacement either during her recovery or afterwards.

I have seen several other cases quite similar, where the retroflexion, having been discovered immediately after its occurrence, was remedied by timely interference and did not return.

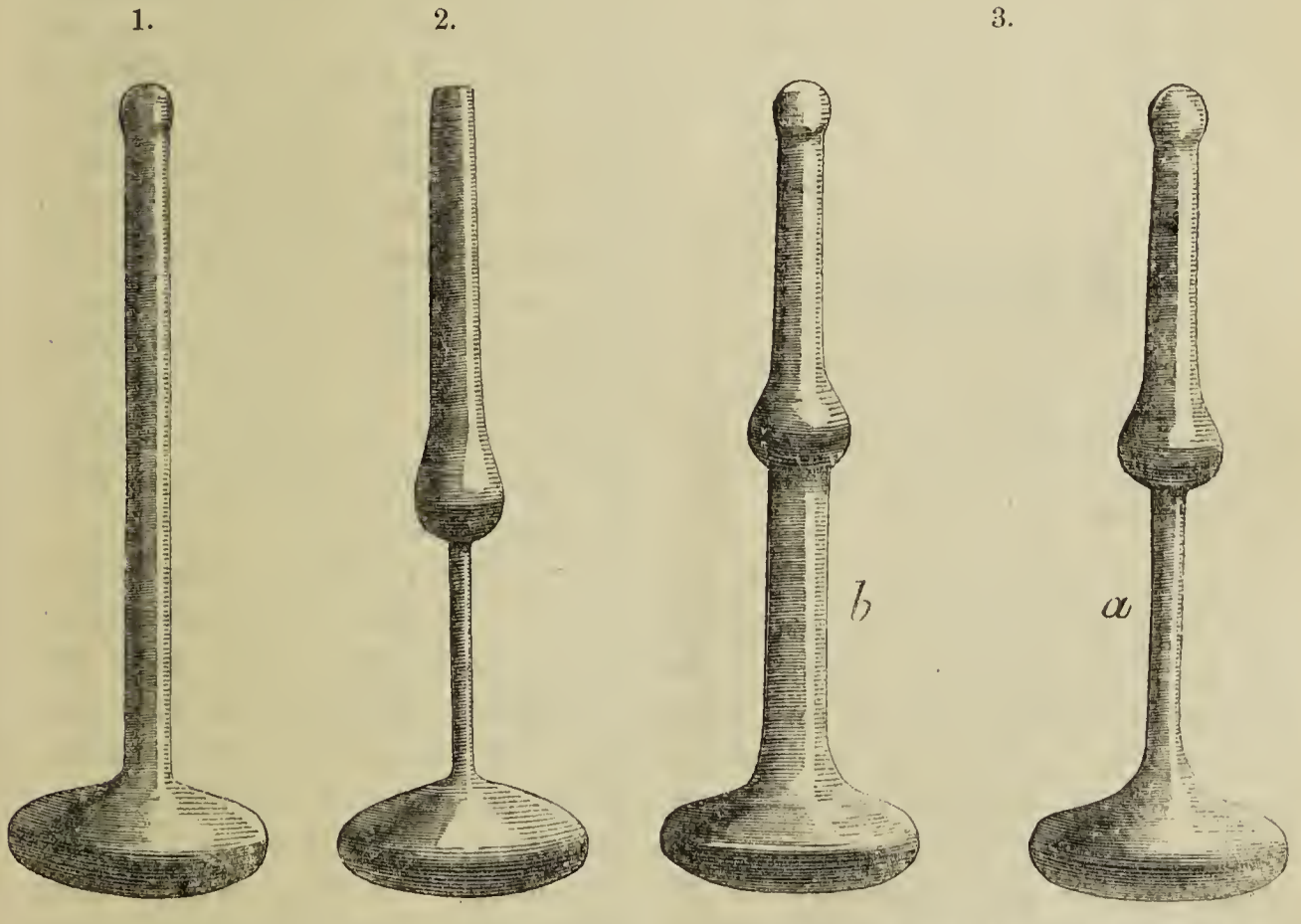
In the following case the result was very different. One of my patients, when about six months pregnant, went to England to visit some friends. When out at dinner, some miles from home, she slipped her foot on coming down stairs, and slid to the bottom; she was considerably bruised, and was put to bed; labour came on, and she was prematurely confined shortly before the completion of the seventh month. The case went on very favourably; but, anxious not to give her friends any extra trouble, she got up very soon after her confinement, returned to her mother's house, and soon walked about a great deal, though with considerable pain and difficulty. She soon after returned to Scotland, complaining much of weakness, pain in the back, and inability to walk or attend to the duties of visiting a charity school, as had been her wont. This continued for many months, when she was at last induced to submit to examination per vaginam, which she had long declined. The uterus was found retroflexed. By wearing the uterine bougies for some time, the uterus was so far restored to its natural position that she was again enabled to attend with comfort to her household and other duties, and to enjoy her long walks as before. The uterus, however, was still slightly curved backwards, though not bent downwards; but the lady positively declined further treatment, from fear of losing the ground she had already gained. She has never again been pregnant. Had the misplacement in this case, as in the former one, been discovered and rectified soon after its occurrence, the infer-

ence is, I think, quite fair, that this lady would have been saved many months of suffering, and might have been the mother of a family.

These cases are good illustrations of the propriety and advantage of examining the state of the uterus when symptoms indicating retroflexion occur soon after delivery, as well as of the mischief and inconvenience of neglecting this simple rule. When the misplacement is thus discovered soon after its occurrence, the organ is very easily replaced; whereas, if it is not so discovered, the uterus, as is gradually regains its normal size, still retains its abnormal position; and when only first discovered months or even years afterwards, may require a lengthened period for its cure, if it be cured at all.

I have, on investigating the circumstances, found that my patients had previously borne a child or had a miscarriage in almost every case where the malposition could not be traced to the causes indicated under the first head—which of course are equally liable to occur in the married woman as in the virgin—though the two cases that I have narrated were both in the latter. My belief therefore is, that this affection is induced either by the causes indicated under the first head, or soon after a delivery or miscarriage, and I cannot as yet understand any other cause for it.

The only instruments that I for a long time used in the treatment



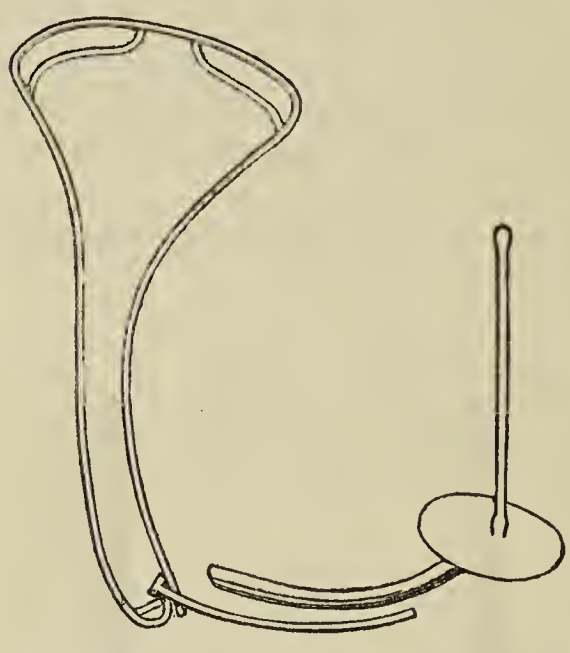
These Bougies are all of the actual size.

No. 3. Two views of the same instrument; *a* shows the thickness of the lower part of the stalk, *b* its breadth.

of these cases were the simple intra-uterine bougie No. 1, or the intra-uterine wire pessary No. 4, as recommended by Professor

Simpson. Were it not for its liability to be extruded from the uterus, the former instrument is to be preferred to all others, as being the most simple, most easily introduced, and the least irritating, though it is surprising how little the wire pessary is so when properly adjusted. Several years ago, I had a bougie No. 2 made, with the lower half of the stalk much smaller than the upper, in the hope that the lower part would be grasped and retained by the cervix uteri, and the expulsion of the instrument from the uterine cavity thus prevented. It succeeded in the first case that I tried it, mentioned at page 6. But, in the next, I was surprised, on visiting my patient, about a week after its introduction, to find her suffering from severe cutting pain. On examination, I found the anterior lip of the cervix nearly cut through by the narrow part of the stalk; such was the force with which the fundus of the uterus, in its acquired tendency to flex downwards and backwards, forced the thin part of the bougie against the anterior portion of the cervix and os uteri. The instrument was removed, and the parts allowed two or three days to heal. The lower half of the instrument was now made thin as before, but flattened and broader; a bulb was also added, to lie in the body of the uterus, just above the cervix. This succeeded perfectly, and is the instrument I now use (No. 3). The central bulb must be made larger or smaller to suit each individual case. It should not pass up too easily, but require a little pressure for its introduction into the uterine cavity.

4



Reduced scale of the intra-uterine wire pessary. The stalk *a*, to lie within the uterus, should be the same size as Bougie No. 1, and the rest of the instrument on a similar scale.

In this form, I find it much more readily retained than when the stalk is wholly of the same diameter. But cases do occur where the tendency in the uterus to flex is so great that even this instrument is forced out; and again, in others, though it is not extruded, the uterus, instead of retaining its normal position, is retroverted in various degrees, though of course not retroflexed in consequence of the presence of the bougie in its cavity; and hence other means are necessary to effect a cure. In cases where this tendency of the fundus uteri to lie backwards is slight, a small piece of sponge, carefully introduced in front of the cervix, will keep the organ in its proper position, or sometimes a properly constructed gutta percha pessary; but when these fail, the intra-uterine wire pessary is the instrument that I find most successful in retaining the uterus in its normal position.

Annoying cases, however, every now and then occur, where even the wire pessary is ineffectual, and where, after its having been worn even for several months, both practitioner and patient are doomed to the disappointment of finding that, soon after the removal of the instrument, the uterus resumes its abnormal position.

In such cases, it occurred to me that if, by the introduction of a graduated series of sponge tents into the uterus, that organ could be gradually dilated and enlarged, much as it would be in a case of early miscarriage, and then allowed to contract upon some properly adapted instrument, this acquired tendency to flexion might be overcome, and the organ restored to its natural condition.

Accordingly, I attempted this plan in a case about four years ago, but it did not succeed. Towards the end of 1857, however, in a case where, after every justice had been done by the patient to the usual treatment, but with an unsuccessful result, and where both she and her husband were most anxious to have a family, I proposed the trial of the sponge tents, which was acceded to, provided Professor Simpson would sanction its use. On consultation with him, he quite concurred in the propriety of this mode of treatment, and the probability of its being successful.[1] The success of the treatment was perfect, in so far that soon after its completion the lady became pregnant, and went to the full period, bearing a healthy child. Encouraged by the success of this case, I proposed its adoption soon after to another patient, who had on two occasions, with a very short interval between them, worn for many months continuously the wire pessary No. 4, but without permanent benefit, as on each occasion, very soon after its removal, the uterus returned to its retroflexed position. This lady had borne a child about three years before, had recovered very rapidly, and left the recumbent posture long before it was considered safe to do so, and gone to the country, where she rode much on horseback. Whether the retroflexion occurred from some strain in the course of the exercise on horseback, or from rising too soon after delivery, it is not easy to say; I think the latter very probable, as she informed me that she had had a very weak back and gnawing pain in it ever since her confinement, and had been unfit for the amount of exercise she used to take before marriage. About two years after her confinement, the malposition was discovered, and its cure unsuccessfully attempted by various means for more than a year, as mentioned above. In this case also the new treatment has proved successful, my patient having been delivered of a fine healthy child. In a third, where the patient had borne several children, and then had a miscarriage about five years since, after which retroflexion took place, and where I had made many unsuccessful attempts to remedy the displacement, this treatment has at last proved successful, as she is now several months

[1] Professor Simpson informs me that he has now successfully employed the same treatment in similar cases.—J. M.

advanced in pregnancy. In other two it has so far succeeded, that some months after the removal of all instruments, the uterus was found to retain its normal condition; whether pregnancy has occurred I do not know, the patients having left town.

In following this mode of treatment, the sponge tents used must of course, at first, be of the smallest possible diameter. Considerable difficulty sometimes attends the introduction of the first sponge, from its softening in the vagina before it can be sufficiently introduced into the os and cervix if narrow, and very often we must be satisfied with getting it introduced merely into the cervix the first day. On withdrawing it the day after, little difficulty is experienced in getting a fresh one passed up to the fundus, but, until this is done, it is of no use proceeding with a sponge of larger size. So soon, however, as a tent of the smallest size has been introduced along the whole course of the uterine cavity, the greatest part of the difficulty is overcome. It is allowed to remain one or at most two days, and then removed; one a little larger is then introduced in its place, and so on till a sponge tent is introduced about the thickness of the thumb—from two to three weeks being required for the several intermediate sizes.

During this time the patient must be carefully watched, as occasionally considerable irritation is induced; twice I have had to suspend the treatment for a few days, from symptoms of pelvic cellulitis. By fomentations, calomel and opium, and other appropriate remedies, the symptoms were relieved, and the treatment afterwards proceeded with. In one case only I have had to suspend its trial, for a time at least, as after two attempts it has induced severe hemorrhage, to which, however, the patient is subject from very slight causes.

On removing the last sponge, I have an intra-uterine wire pessary prepared, the stem of which is covered with gutta percha to the size of about half of an inch in diameter, and which is immediately introduced into the cavity of the uterus, and allowed to remain for one or at most two days. This is replaced by another where the gutta percha is about half the thickness of the first, and this again in a day or two by a third proportionally smaller, and this in two, three, or four days by the ordinary intra-uterine wire pessary, which remains for five or six days.

For a week or two after its removal, the patient should remain either in bed or loosely dressed on the top of the bed. The uterus should be daily examined, lest any tendency to turn back occur, so as to have it rectified at once, either simply by restoring it to its position with the uterine sound, or, if necessary, with the wire pessary again introduced for a day or two; but this I have not required to do. Sometimes the prone position seemed useful where there was this tendency. If during this period the uterus maintain its normal position, the patient may be allowed, after the next catamenial period, to take a little more freedom, and gradually to

resume her usual habits, care being especially taken that the bowels be kept easy, and that every kind of straining or violent exertion be avoided.

The sponge tent is so disagreeable to use, as also so expensive, that other means have been employed as substitutes. Gentian root has been recommended. No doubt it will dilate, but the difficulty would be to get it out without breaking it. It is surprising with what force the uterus grasps the upper half of the sponge, and the difficulty experienced in withdrawing it.

On the occasion of my bringing these cases before the Obstetrical Society, Dr Keiller suggested that india rubber dilators, which he has been at much trouble in getting made of various shapes, might be substituted for the sponge tents, which are so disagreeable to handle after they have been in the uterine cavity for 24 or 48 hours. I tried one unsuccessfully, but they have since been improved, and may answer the purpose better now. I think these dilators extremely useful and valuable in certain cases, but doubt whether they will answer in those under consideration, though I should be glad to find that they could supersede the sponge tents.

I hope that the plan of treating retroflexion of the uterus here suggested, may be as successful in the hands of others as it has hitherto been in mine. It requires, during its whole course, much more watching and constant attention than the means previously in use, and is frequently attended with considerable anxiety; but the satisfaction always felt by the medical man in the successful termination of any distressing or difficult case much more than compensates him for all the trouble and anxiety which it may have cost.

P.S.—In connection with the preceding observations, the following paragraph (p. 134) from the late Professor Hamilton's *Outlines of Lectures on Midwifery*, published in 1826, is very interesting, as indicating, in the first place, that eminent man's great accuracy in the observation and description of disease; and, in the second, the advances made since his time in the knowledge and treatment of uterine affections:—

"An unequal projection of different sizes is occasionally discovered on the posterior part of the uterus, resembling in shape the tubera, which form upon the surface of the liver, but differing from tubera in being of a more resisting texture, and in being pained on pressure. From the cases which have fallen under the author's notice, it appears to him that the following is the progress of this fortunately rare disease:—At first, there is a slight enlargement of the uterus, with a little thickening and tenderness of its posterior surface, occasioning a sense of bearing down on making any unusual exertion, and an obscure gnawing pain towards the back part of the pelvis. In the progress of the disease, the posterior surface of the uterus becomes more and more unequal, till at last a distinct projection like a walnut, or even larger, can be felt on examination per anum. At this stage of the disease, the patient can neither stand nor sit upright, such is the continued uneasiness in the back part of the pelvis. It is remarkable, that in this, as well as in several other of the local diseases of the uterus, the catamenia continue to flow as usual.

"In the early stages of this disease, the progress has been generally checked by the means employed in cases of chronic enlargement of the uterus; but, in the latter stages, that is, after the circumscribed projection has taken place, no means of treatment have hitherto proved successful."

It must be evident that the affection here so distinctly described by Dr H., but which so much puzzled him both as to its nature and treatment that he has not even attempted to name it, was no other than retroflexion of the uterus. The general symptoms are the same. The description of the state of parts, as felt on examination, is also exactly the same. Of its true nature and cause he was not however aware; and accordingly, as he candidly states, no mode of treatment had proved successful in his hands.